Appendix O

MEDIA RESEARCH AND ANALYSIS

AN INTRODUCTION

Since the early part of the 20th century, when there was almost no interest in the size of audiences or in types of people that comprised various audiences, business leaders and their organizational communicators have increasingly come to rely on research for nearly every major decision they make. This expanded demand for information has created a particular demand for media communication research capabilities, specifically -- the development of a scientific basis for media analysis and media effects.

The importance of mass communications research and media analysis is partly due to the realization that gut feelings or reactions are not entirely reliable or credible bases for decisions. Although common sense is often accurate, Army commanders and other decision-makers need additional, more objective information to evaluate problems, especially when lives are at stake. Thus, the past 50 years have witnessed continuing evolution of media analysis, combining research and intuition to create a higher probability of success.

This evolution has resulted in a "scientific" approach to media research known as media content analysis.

SCIENTIFIC RESEARCH: A DEFINITION

Scientific Research is defined as a "**systematic, controlled, empirical, and critical investigation of hypothetical propositions about the presumed relationships among observed phenomena.**" This definition contains the basic terms that are necessary in defining the method of scientific research and describes a procedure that has been accepted for centuries. In the 16th century, for example, scientist Tycho Brahe conducted years of systematic and controlled observation to prove wrong many of Aristotle's theories of the universe. By gaining an understanding of the phenomena, he challenged the accepted beliefs and knowledge of the time with his own hypotheses. Thus, scientific research was begun.

Whether we realize it or not, we all conduct research as a matter of course in our day-to-day life whenever we speculate about the possibility of something -- we start with an idea or concept and test it.

All research begins with a basic question or proposition about a specific phenomenon -- for example, Why do Americans usually support the soldiers within the Army when they may not support the operation the soldiers are involved in? What factors determine why Americans will support the political justification for military involvement? What types of messages are most effective in garnering support for American forces?

The answers to these questions can be forecast to some degree with well-designed research studies. There are some difficulties, however. The Army media analyst faces the problems of determining which data collection methods can most accurately provide answers to the questions at issue, and in gaining adequate access to information prior to and during military operations. In the pages that follow, we will describe the methods and procedures PA professionals may use in overcoming these difficulties.

RESEARCH APPROACHES

There are several research approaches or "methods of knowing" which have been used to conduct studies: intuition, authority, and science.

In the **intuition** approach, one assumes that something is true because it is "self-evident" or "stands to reason." An example of this type of thinking would be if some Public Affairs leaders resist efforts to perform area studies because they believe they already "know" their AO.

The **authority** method seeks to promote a belief in something because a trusted or credible source says it is true. Here, the emphasis is on the source, not the methods the source may have used to gather his information.

The **scientific method** approaches learning as a series of small steps, with each step identifying more specific information and leading to a more clearly identifiable conclusion.

For example, one study or source provides only an *indication* of what may or may not be true; the "truth" is found only through a series of objective analyses.

This means that the scientific method is self-correcting in that changes in thought or theory must be continually reviewed, that issues and situations require constant monitoring.

The scientific method has become a valuable tool to produce accurate and useful data in mass media research. This annex focuses solely on the scientific approach and forms the fundamental basis for media content analysis in Army Public Affairs.

MEDIA RESEARCH: THE SCIENTIFIC METHOD

The goal of Public Affairs media research is to provide the methodology to support situational assessment, planning and decision-making that is fast, inexpensive, reliable and valid. The application of scientific methodologies to media research by Public Affairs personnel accomplishes this goal.

Five basic characteristics, or tenets, distinguish the scientific method from the other methods of research. A research approach that does not follow these tenets cannot be considered a scientific approach:

- **Scientific research is objective.** Science tries to rule out eccentricities of judgment by researchers. When a study is undertaken, explicit rules and procedures are constructed and the researcher is bound by them, letting the chips fall where they may. Objectivity also requires that scientific research deal with facts rather than interpretations of facts.

- **Science is empirical.** Researchers are concerned with a world that is knowable and potentially measurable. (Empiricism derives from the Greek word for "experience.") Analysts must be able to perceive, understand, and classify what they study and reject nonsensical explanations of events. For example, a newspaper editor's claim that declining readership rates are "God's will" would be rejected by scientific researchers because such statements cannot be perceived, classified or measured. Experience shows that there are usually easily identifiable reasons for declining readership.
- **Scientific research is systematic and cumulative.** No single research study stands alone, nor does it rise or fall by itself. Astute research analysts always use previous studies as building blocks for their own work. One of the first steps taken in conducting research is the review of all available literature on the topic so that the current study will draw on the heritage of past research.
- **Scientist attempt to find order and consistency in their findings**. In its basic form, scientific research begins with a single, carefully observed event and progresses ultimately to the formulation of theories and laws. A theory is a set of related propositions that present a systematic view of phenomena by specifying relationships among concepts. Researchers develop theories by searching for patterns of uniformity to explain and describe the information collected.
- **Scientific research is predictive.** Science is concerned with relating the present to the future. In fact, scientific researchers strive to develop theories because they are useful in predicting behavior. The importance of theories lies in their ability to predict an outcome or an event successfully. If a theory generates predictions that are supported by data, and the results are always the same, the theory can be used to make predictions in other similar situations.

MEDIA ANALYSIS STEPS

Evaluation of a problem must follow a standard sequence of steps to increase the chances of producing relevant data. Analysts who do not follow a prescribed set of steps increase the amount of error possible in the study.

These steps are:

- Select a topic (issue, situation, perception, or belief).
- Review existing research and other available information on the topic.
- Develop hypotheses and research questions.
- Determine an appropriate methodology, format or design.
- Collect relevant data.
- Analyze and interpret the results.
- Present the results in appropriate form (Information Paper, PA Study or PA Estimate)
- Validate and replicate the study when necessary.

The use of the scientific method of research is intended to provide an objective, unbiased evaluation of data pertaining to an issue or event. To investigate hypotheses systematically, media analysts must follow these steps. However, merely following the eight steps does guarantee that the research is good, valid, reliable or useful.

A countless number of intervening variables (influences) can destroy even the most well-planned research effort. Unanticipated events occurring during the research period may impact the results and they must be accounted for during the process. However, PA analysts must remain focused on the purpose of the research effort and not lose sight of the original objectives.

STEP 1 -- SELECTING A TOPIC, DETERMINING RELEVANCE

Selecting a research topic is usually not a concern for Public Affairs analysts -- planning guidance, current situations, and most importantly, the operational issues confronting our commands, will guide the application of media content analysis. In most instances, the Public Affairs analyst will receive planning guidance well in advance of an operation, which will help determine the issues to be addressed.

Once the basic subject has been chosen, the next step is to ensure that it is relevant to the operation or situation at hand. This can be accomplished by answering six basic questions.

- What is the goal of this research effort?
- Is the subject too broad?
- Can the subject really be studied?
- Is the subject significant?
- Can the results of the research be generalized, communicated and understood?
- Does the issue lend itself to analysis?

Underlying all eight steps of the Media Analysis process is the necessity for validity. In other words, are all eight steps (from topic selection to data analysis to presentation and interpretation) the correct ones to follow in trying to answer these questions?

The answers to these questions will help focus the research you must do, make information gathering easier, and ensure the results are valid.

STEP 2 -- REVIEW OTHER RESEARCH AND INFORMATION

Media analysts should always begin studies by consulting all literature, research, and other information available on the topic. The review provides information about what work has been done, how it was done, and what the results were as they apply to a given subject. It not only allows analysts to learn from (and eventually add to) previous media research, but also saves time, effort and money.

The review also helps to identify the facts pertaining to the situation being studied.

Completed media content analysis also provides a starting point for PA leaders who will follow in your position after you move on.

STEP 3 -- DEVELOP HYPOTHESES AND RESEARCH QUESTIONS

After the general research are has been identified and the existing information reviewed, the analysts must state the problem or issue as a workable **hypothesis** or **research question.**

(Example: "The American public is losing confidence in the Army's ability to protect its soldiers, resulting from the media's portrayal of Army leaders as negligent and soldiers as lacking competence in avoiding fratricide.")

A hypothesis is a formal statement regarding the relationship between variables and is tested directly. In the example cited above, those variables are the news media, the messages they send, and the perception and understanding of those messages by the American public. With a hypothesis, the predicted relationship between the variables is either true or false. Identifying the degree of "trueness" or "falseness" and their implications is essential to the development of information campaign strategies.

On the other hand, a research question is a formally stated question intended to provide indications about something, and is not limited to the relationships between variables. Research questions are generally used in situations where an analyst is unsure about the nature of the problem under investigation. The intent is merely to gather preliminary information. Research questions are generally used to identify the focus and scope of a research project.

STEP 4 -- DETERMINE AN APPROPRIATE METHODOLOGY/RESEARCH PROGRAM DESIGN

Given the variety of situations facing Public Affairs personnel, different approaches to media research are required. Some issues lend themselves more toward survey methodology via telephone, E-mail, or standard mail; others are best attacked through in-person interviews. Still other problems necessitate a controlled evaluation situation designed to eliminate extraneous variables by targeting analysis to specific media types. (An example of this approach would be a study of how a newspaper covered a specific story over a six-month period.)

The approach selected by the analyst depends on the goals and purpose of each particular study. Regardless of whether the problems or issue being addressed is a local one, affecting only a fraction of a community audience, or a national issue affecting us all, all research requires a design of some type. All procedures, including all variables, samples, and measurement instruments, must be pre-designed with hypothesis and research questions in mind.

There are four characteristics of research design that should be noted if a research study is to produce reliable and valid results:

- **Accurate setting**. For a study to have external validity, the study must be conducted as an historical account of the situation during the time frame studied. The analyst must have a clear understanding of the events unfolding around him and attempt to document as much related information as possible.
- **Clear cause-and-effect relationships**. The analyst must make every attempt to identify spurious dependent relationships and

weed them out. The results of a study can be interpreted with confidence if and only if all confounding effects are identified.

STEP 5 -- COLLECT RELEVANT DATA

STEP 6 -- ANALYZE AND INTERPRET THE RESULTS

STEP 7 -- PRESENT THE RESULTS IN APPROPRIATE FORM (PA STUDY OR PA ESTIMATE)

STEP 8 -- VALIDATE AND REPLICATE THE STUDY WHEN NECESSARY